ABSTRACT

HPLC evaluation of selected drugs II.

THESIS

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In this thesis was validated method for simultaneous HPLC analysis of paracetamol and tramadol in combined tablet. As stationary phase the chromatographic column Discovery HS F5, 5 μm, 150×3 mm I.D. made by Supelco was used. Mobile phase was formed by mixture of acetonitrile : ammonium acetate solution 0.005 mol/l, acidified with acetic acid at pH 3.2 in the ratio 20:80 (v/v). A flow rate was 1.0 ml/min. Acetylsalicylic acid was used as an internal standard. The detection was performed at λ = 270 nm using an UV detector. The substances were eluted in following order: paracetamol, acetylsalicylic acid and tramadol. The method was validated for linearity (paracetamol R = 0.9996; tramadol R = 0.9998), precision (paracetamol RSD = 0.31 %; tramadol RSD = 0.70 %), accuracy (paracetamol recovery = 99.49 %; tramadol recovery = 98.90 %) and robustness.